

Foreign Agricultural Service *GAIN* Report

Global Agriculture Information Network

Voluntary Report - public distribution

GAIN Report #RS2010

Date: 03/06/2002

Russian Federation Sanitary/Phytosanitary/Food Safety Russian Sanitary Rules and Norms 2002

Approved by:

Geoffrey W. Wiggin

U.S. Embassy, Moscow

Prepared by:

Michael Smith and Mikhail Maximenko

Report Highlights:

Russian Government plans to adopt food safety standards in accordance with hygienic requirements approved in 1996. Currently active US - Russian veterinary import certificates were negotiated on the bases of Russian medical and biological requirements approved in 1989. U.S. trade could be affected if inconsistent requirements prevail.

Russian Veterinarians Update Sanitary Rules and Standards

Most Russian veterinary certificates for imported U.S. meat were agreed upon in 1996 based on Russian Medical and Biological Requirements adopted in 1989. Presently, the Russian Veterinary Department is updating its food import regulations in accordance with Hygienic Requirements (SanPiN 2.3.2.560- 96) adopted in 1996. According the Russian Veterinary Department, new meat import certificates reflecting the laws and norms of SanPiN-96 are being developed. Changes to import certificates could affect U.S. meat exporters and hinder market access. This SanPiN-96 was originally sent to FAS Washington in hard copy in 1997 and in February 2002. It is now being sent in report form to ensure that a translation is readily available electronically.

Background

In 1998, the Russian Veterinary Department sent a letter to the American Embassy Agricultural Attache Office (FAS) notifying that Russia is adopting norms and standards in accordance with hygienic requirements approved by the State Committee on Sanitary and Epidemiology Surveillance in 1996. As an attachment to the letter, the veterinary department also forwarded sections of the approved SanPiN-96 concerning poultry standards, norms, and residue tolerances. However, since the Russian Veterinary Department is still developing normative and legal acts in accordance with the SanPiN-96, and the United States and Russian veterinarian departments already have agreed upon certificates for exporting U.S. poultry to Russia, it has not yet become necessary to take concrete actions in response to the notification.

FSIS discussed proposed changes to the poultry meat import certificate based on SanPiN-96 during annual poultry plant inspections in August 2001. According to Russian poultry inspectors, there was concern about U.S. compliance with salmonella requirements and controlled antibiotics standards outlined in the SanPiN-96 regulations. These concerns were dramatically brought to light recently. A letter from Chief Russian veterinarian Mikhail Kravchuk, dated February 11, 2002, requested that U.S. veterinarians provide detailed information before March 1, 2002 concerning feed additives, the use of antibiotics, and sanitary standards adhered to by producers and processors of U.S. poultry. Despite a timely U.S. veterinary response to the list of 14 questions contained in the letter, on March 1st the Russian Veterinary Department announced a temporary ban on U.S. poultry beginning March 10, 2002, supposedly based on concerns about food safety and quality.

Below is a translation of SanPiN-96, concerning general requirements as well as poultry and seafood residue tolerances:

SanPiN-96

Official publication:

These Sanitary rules shall not be completely or partially reproduced, copied or disseminated without the permit of Gossanepidnadzor Department of the Ministry of Public Health Care of Russia

APPROVED

By the Resolution of Goscomsanepidnadzor of Russia of October 24, 1996 # 27; enters into force from the date of publication – for new products being developed, enters into force 6 months after publication – for the products being produced and imported

2.3.2. FOODSTUFF RAW MATERIAL AND FOODSTUFFS

HYGIENIC REQUIREMENTS FOR THE QUALITY AND SAFETY OF FOODSTUFF RAW MATERIAL AND FOODSTUFFS

Sanitary rules and regulations SanPiN 2.3.2. – 96

1.SCOPE OF APPLICATION

- 1.1. Sanitary rules and regulations "HYGIENIC REQUIREMENTS FOR THE QUALITY AND SAFETY OF FOODSTUFF RAW MATERIAL AND FOODSTUFFS" (hereinafter referred to as Sanitary rules) establish hygienic regulations for quality and safety of foodstuff raw material and foodstuffs in reference to human individuals as well as requirements with respect to compliance with these regulations in foodstuffs handling.
- 1.2. These Sanitary rules have been developed based on the Law of the Russian Soviet Federative Socialist Republic "On sanitary-epidemiological well being of the population", "The basic legislation of the Russian Federation on protecting the citizens' health", the Federal Law "On radiation safety of the population", the Federal Law "On introducing alterations and additions to the Law of the Russian Federation "On protecting consumers' rights", the Regulation on the State (Federal) sanitary-epidemiological regulating as well as the Regulation on the State (Federal) sanitary-epidemiological service of the Russian Federation.
- 1.3. The requirements of these Sanitary rules are applied in reference to the foodstuff produce at the stages related to the new kinds of products developing and entering into production, during their processing, producing, storing, transporting, purchasing, importing into the

country and selling (hereinafter referred as foodstuff produce handling).

- 1.4. The Sanitary rules are designed for the Federal executive power authorities as well as for the local self-governing bodies, enterprises, organizations, establishments and other legal entities (hereinafter referred to as organizations), citizens-entrepreneurs that are not legal entities, officials and citizens involved in the activities in the sphere of foodstuff produce handling, for organizations exercising their activities in the sphere of mandatory certification of the foodstuff produce, for the State (Federal) sanitary-epidemiological service organizations of the Russian Federation (hereinafter referred to as Gossanepid-service of Russia) and sanitary-epidemiological services of the Federal bodies of executive power exercising State (Federal) and Agency sanitary-epidemiological supervision as well as for other organizations authorized to exercise the State (Federal) control over the quality of the foodstuffs.
- 1.5. Hygienic requirements for the substances and materials including auxiliary and packaging ones, as well as for items manufactured from them that come in contact with the foodstuffs are established by specific sanitary rules and regulations.

2.REGULATORY REFERENCES 3.TERMS AND DEFINITIONS

These sanitary rules contain the following basic terms and definitions:

Foodstuff produce is foodstuff raw material, foodstuffs and their ingredients, ethyl alcohol and alcohol produce;

Foodstuffs are products utilized by human individuals as food in natural or processed form; Foodstuff raw materials are objects of plant, animal, microbiological as well as mineral origin used to produce foodstuffs;

Food additives are natural or synthesized substances that have been introduced into the foodstuffs on purpose to preserve their characteristics and (or) assign specific characteristics to them:

Biologically active additives for food are concentrates of natural (identical to natural) biologically active substances designated for direct intake with the food or for introduction into the foodstuff composition;

Materials coming into contact with foodstuffs are packaging and auxiliary materials as well as items manufactured from them that come into contact with the foodstuff raw material and foodstuffs during their production, transportation, storage and sales used for the purpose of foodstuffs protection from exterior impact;

Children's food products are specific foodstuffs that comply with the specificity of children's organisms;

Dietary products are specific foodstuffs designated for the purposes of preventive and curative diet therapy;

Quality of foodstuff produce is the integrity of characteristics that condition consumer properties of the foodstuff produce and ensure its safety for human individuals;

Quality certificate is the document by way of which the producer confirms the origin of the foodstuff produce and its compliance with the requirements of regulatory and technical documentation:

Foodstuff produce safety is the lack of danger for the life and health of human individuals of the present and the subsequent generations determined by the foodstuff produce compliance with the

requirements of these Sanitary rules, other sanitary rules, regulations and hygienic standards; Foodstuff produce safety justification is the activity on the part of the new produce developer and produce manufacturer to detect the produce properties and characteristics presenting potential hazards for the life and health of the human individual, to organize developing hygienic quality and safety regulations as well as requirements to ensure those regulations during foodstuff produce handling stages;

Consumer qualities of foodstuffs are foodstuff properties ensuring physiological requirements of the human individual and complying with the purpose characteristic for the given kind of produce designation and its usual application;

Alimentary value is the set of foodstuff properties providing for physiological needs of the human individual with respect to energy and basic alimentary substances;

Biological value is the index of foodstuff protein quality reflecting the level of amino-acid content compliance with the body's need for amino-acids to synthesize protein;

Biological efficiency is the index of foodstuff fat components quality reflecting their content of polyunsaturated fatty acids;

Energy value is the quantity of energy (kcal, kJ) released in the human body from alimentary substances of the foodstuffs to provide for the body's physiological functioning;

Foodstuff handling is the activity associated with foodstuff developing, producing, processing, purchasing, supplying, storing, importing to the country's territory, transporting, selling, utilizing, disposing of and destroying;

Sales is foodstuff produce selling, supplying, transferring to the consumer under certain conditions.

4.GENERAL PROVISIONS

- 4.1. Foodstuff produce composition and properties characterizing its consumer qualities as well as its safety for the human individual are determined by its organoleptic, physical-chemical, microbiological, parasitologic and radiological indices, by its contents of potentially hazardous chemical compositions and biological subjects as well as by the produce alimentary value indices.
- 4.2. The requirements of these Sanitary rules shall be complied with when developing the Federal standards, regulatory and technical documentation governing the issues pertaining to foodstuff produce handling.
 - The drafts of the Federal standards, regulatory and technical documentation shall be agreed upon by the organizations of the Gossanepid-service of Russia.
- 4.3. When developing the new kinds of foodstuffs, foodstuff raw material, materials coming in contact with them as well as upgrading (altering) the technological processes by legal entities involved in such developing justification shall be provided in reference to the produce safety, shelf life and quality and safety indices, requirements to comply with the quality and safety indices during the handling stages as well as methods of control and monitoring.
- 4.4. The new produce developer and (or) manufacturer shall mandatory include into the regulatory and technical documentation such data as indices reflecting the produce properties and safety, hygienic standards, requirements to ensure these standards in the process of the produce manufacturing, storing, transporting and selling as well as requirements for its packaging and labeling, shelf life dates and methods to control the

- produce quality and safety.
- 4.4.1. Foodstuff produce manufacturing is carried out in accordance with regulatory and technical documentation, it shall comply with the requirements of rules and
 - standards in the area of ensuring its quality and safety and the producer shall confirm it by the quality certificate.
- 4.4.2. Foodstuff produce that is manufactured in the social food catering organizations does not require quality certificate when it is offered for sale.
- 4.5. It is permitted to commence manufacturing new foodstuff produce or manufacturing the produce that is not new but is being developed for production at the particular plant for the first time only in case the product manufacturer is granted the hygienic enclosure and (or) hygienic certificate issued by the organizations of Gossanepid-service of Russia confirming that its quality and safety comply with the requirements established by these Sanitary rules.
- 4.6. The foodstuff produce imported to the territory of the Russian Federation shall comply with the requirements of these Sanitary rules.
- 4.6.1.Safety of imported foodstuff produce is determined n the basis of hygienic expert assessment of the particular type of the produce that is being imported for the first time as well as the assessment of its compliance with these Sanitary rules and the requirements of safety established for such produce in the country of its origin.
 - The hygienic expert assessment of such produce is carried out by the specially authorized organizations of Goscomsanepidnadzor of Russia and of the Ministry of Public Health Care of Russia.
- 4.6.2. The indices and related hygienic standards that have been set up as a compliance reference point for the kind of foodstuff produce to be imported into the country and for the foodstuff batch (batches) that is (are) being imported into the country shall be indicated in the hygienic certificate.
- 4.6.3.Organizations that carry out procurement and shipment of the imported foodstuff produce shall mandatory receive the hygienic certificate in the organizations of the Gossanepid-service of Russia prior to its import to the territory of the Russian Federation.
- 4.7. Bagging and packaging of the foodstuff produce shall ensure preserving its quality and safety during all stages of the produce handling.
- 4.8. The foodstuff producer shall manufacture them labeled in accordance with the legislation of the Russian Federation and in compliance with the requirements of these Sanitary rules, standards and technical documentation.
- 4.9.1.Baged and packaged foodstuffs including biologically active additives to food and food additives shall have labels (inserts) with the following indications in the Russian language:
 - name of the product and kind of the product;
 - area of application (for specific products designated for children's and dietary alimentation, food additives);
 - name of the organization-producer and its legal address (for imported products the country of origin and name of the company-producer);
 - weight and volume of the produce;
 - names of the ingredients in the product composition including food additives;

- alimentary value (calorie content, proteins, fats, carbohydrates, vitamins, microelements);
- storage terms and conditions (for the products with limited expiry dates as well as for those requiring specific storage);
- expiry dates and the production date;
- production technology (for concentrates and specific products designated for children's and dietary alimentation as well as for other products requiring recommendations for the consumer with respect to their preparation);
- recommendations on the use of specific products designated for children's and dietary alimentation as well as on the use of biologically active additives for food; if necessary contradictions against their use shall be also listed).
- 4.9.2. It is prohibited to use the terms "dietary", "curative" or their equivalents in the names of the foodstuffs, in the labeling on the consumers' packaging and in the products' promotional inserts without a special permission of the Ministry of Public Health Care of Russia.
- 4.10. When the foodstuffs are stored or transported activities shall be carried out aimed at the compliance of the foodstuff quality and safety with the requirements of the Sanitary rules and regulations as well as with the standards.
- 4.11. Organization involved in the foodstuff produce sales shall mandatory provide conditions for the produce selling in compliance with the Sanitary rules and regulations with respect to ensuring the produce quality and safety.
- 4.11.1.It is not permitted to sell the foodstuffs, foodstuff raw material and materials coming into contact with the above mentioned:
 - if they do not comply with the Sanitary rules and regulations with respect to ensuring the produce quality and safety;
 - if the producer does not have the quality certificate;
 - after the expiry date;
 - if the selling conditions are not adequate;
 - lacking information on conducting mandatory certification;
 - if they are subject to being labeled but the label (insert) is missing, or if the label or stamp does not contain the data established by these Sanitary rules;
 - if it is not possible to identify them.
- 3.12. The foodstuff produce that does not comply with the hygienic standards established by these Sanitary rules is prohibited for import, storage, transportation or sales to the population.
- 3.13. The foodstuff produce of the quality not consistent with the hygienic standards is withdrawn from handling in accordance with the Regulation of the bodies exercising the State (Federal) supervision and control, it is not eligible for selling in for declared purposes and has to be utilized for different purposes, disposed of or destroyed.
- 3.13.1. Justification of the possible ways and conditions to utilize, dispose of or destroy the foodstuff produce is carried out by its owner upon agreement with the bodies that passed the Regulation on its removal; with respect to the produce that was considered unacceptable for food purposes it is done upon agreement with the bodies of the Gossanepid-service of Russia (with respect to the animal origin produce it is required achieving agreement with the Federal veterinary supervision bodies as well).

- 3.13.2. The owner of the foodstuff produce or organization or the physical individual who signed the contract with the owner to fulfill the following kinds of activities shall utilize, dispose of or destroy the removed produce.
- 3.13.3. Prior to utilization, disposition or destruction the produce removed shall be subject to storage in the separate premises (reservoir), shall be specially accounted for with accurate indication of its quantity, ways and conditions for its utilization, disposition or destruction.
 - Its owner bears responsibility for such produce storage.
- 3.13.4. Foodstuff produce and foodstuffs subject for destruction shall undergo denaturation; the techniques, dates and terms of denaturation shall be determined on the case by case basis by their owner upon agreement with the bodies exercising Federal supervision and control.
- 3.13.5. The owner of the produce shall submit a certificate on its utilization, disposition or destruction to the bodies that passed the Regulation on its removal, and the certificate on transmittal of the products to be used for animal feeding to the bodies of the Federal veterinary supervision.
- 3.13.6. The bodies that passed the Resolution about removal of the foodstuff produce from handling shall exercise control over its utilization, disposition or destruction.
- 3.14. Industrial control as well as the Federal and Agency sanitary-epidemiological supervision shall be exercised over compliance of the foodstuff produce quality with hygienic regulations.
- 3.14.1. Industrial control over compliance of the hygienic regulations in reference to quality and safety of the foodstuff produce is exercised by the organizations acting in the sphere of such produce handling.
 - The procedures to conduct industrial supervision are determined by the organization-producer in accordance with the requirements of the regulatory and technical documentation under the working programs approved by the organizations of the Gossanepid-service of Russia.
- 3.14.2. The Federal sanitary-epidemiological supervision over the quality of the foodstuff produce is exercised by the organizations of the Gossanepid-service of Russia; the Agency sanitary-epidemiological supervision is carried out by the organizations of the Sanitary-epidemiological services of the Federal bodies of the Executive power whom the legislation of the Russian Federation has entrusted with those functions.
- 3.14.3. To conduct laboratory testing (measurement) in reference to the foodstuff produce quality and safety it is permitted to use metrologically certified techniques complying with the requirements of '?EG 8.010-90 and '?EG 8.556-91 with established values for deviations not exceeding the deviation regulations of '?EG 27384-87 as well as methodologies approved or accepted for use by the Gosstandart of Russia or by the Gossanepid-service of Russia.
- 3.14.4. The list of the regulatory and methodical documentation for the techniques to test the foodstuff produce in the laboratories when exercising industrial control, Federal and Agency sanitary-epidemiological supervision is given in Attachment 1.

4.HYGIENIC REQUIREMENTS TO FOR THE QUALITY AND SAFETY OF FOOD STUFF AND RAW MATERIAL

- 5.1. Quality and safety of the foodstuff produce as well as its potential to satisfy physiological needs of human individuals are determined in accordance with hygienic regulations established by these Sanitary regulations.
- 4.2. Organoleptic properties of the foodstuff raw material as well as the foodstuffs are determined by the indices of taste, color, smell, consistency and appearance characteristic for each kind of the produce.
- 4.2.1. Organoleptic properties of the foodstuff raw material as well as the foodstuffs shall satisfy the traditional tastes and habits of the population and shall not give rise to complaints on the part of the population.
- 4.2.2. The foodstuff raw material as well as the foodstuffs shall not contain strange smells, tastes and inclusions, they shall not differ in terms of color and consistency that are characteristic to the given kind of produce.
- 4.2.3. The requirements with which the organoleptic characteristics are to comply are established in the regulatory and technical production documentation.
- 4.2.4. Organoleptic properties of the foodstuff produce shall not deteriorate during its storage, transportation and during the selling process.
- 4.3. The foodstuff raw material and foodstuffs safety with respect to its epidemiological and radiological characteristics and to the content of its chemical contaminants shall be determined by their compliance with the hygienic regulations established in sections 6 and 8.
- 4.4. The hygienic regulations include potentially hazardous chemical compositions and biological objects that shall not exceed the permissible levels in the tested mass (volume) of the given produce.
- 4.5. The foodstuff raw material and the foodstuffs shall comply with the limitations in reference to the contents of the basic chemical contaminants that are hazardous for the human individuals' health.
- 5.5.1.The hygienic requirements in reference to the permissible level of toxic element content shall be imposed on all kinds of foodstuff raw material and foodstuffs.
- 5.5.2.The content of the myco-toxins aflatoxin B1, desoxinivalenol (vomytoxin), zearalenon, T-2 toxin, patulin is limited in the foodstuff raw material and foodstuffs of the plant origin; aflatoxin M1 is limited in milk and dairy produce.
- 5.5.2.1.The priority contaminants are: desoxinivalenol for the grain produce, aflatoxin B for nuts and seeds of the oil containing plants, patulin for fruit and vegetables.
- 5.5.3.All kinds of foodstuff raw material and foodstuffs are regulated in reference to the global pesticide contaminants hexachlorine-cyclohexan (", \$ and (- isomeres) and DDT and its metabolites. Some products (fish, grain) are regulated with respect to the most frequently tested priority pesticides: mercury-organic, 2,4-D acid, its salts and esters.
- 5.5.3.1.Other pesticides including fumigants are being monitored in accordance with information on their applications in the accompanying produce documents being guided by ' = 1.1546-96 "Hygienic regulations on the pesticide contents in the environmental objects".
- 5.5.3.2. Pesticides, fertilizers and other agricultural chemicals that are not registered

- in accordance with the established procedure are not permitted in the production of plant origin foodstuff raw material.
- 5.5.4. Animal origin foodstuffs are subject to veterinary preparation regulation.
- 5.5.4.1. Animal origin foodstuffs are subject to regulation in reference to the residual quantities of antibiotics used in animal husbandry for animal and poultry feeding, treating for diseases and preventing from diseases.
 - Meat, meat produce, by-products of slaughtered cattle and poultry is subject for regulations for both feed antibiotics approved for application in agriculture grizyn, batsitratsin and curative antibiotics most frequently used in veterinary practice antibiotics of the tetracycline group, levomitsetin.
 - Milk and dairy produce shall be regulated for penicillin, streptomicin, tetracycline group antibiotics, levomitsetin; eggs and egg produce for batsitratsin, tetracycline group antibiotics, streptomicin, levomitsetin.
- 5.5.4.2. The hormone preparation contents and the contents of other antibiotics that are not listed in p. 5.5.4.1. as well as veterinary preparations are checked in the imported produce in accordance with the expert assessment procedure with respect to the certificate of the country of export and the company-manufacturer guided by the maximal levels of veterinary preparation residuals in animal and poultry husbandry recommended by the Expert Joint committee of FAO WHO on food additives and contaminants, listed in Attachment 2. Should it be necessary analytical testing of both domestic and imported meat and dairy produce shall be carried out in accordance with the arbitrage procedure.
- 5.5.4.3. The use of feed additives, veterinary medical drugs and preparations for animal treatment deteriorating the foodstuff quality and not registered in accordance with the established procedure is not permitted in the production of animal foodstuff raw material.
- 5.5.5. The following substances are being regulated: polychlorine biphenyles in fish and fish produce, benzapyrene in grain, smoked meat and fish produce. This produce is considered to be marked with respect to these contaminants.
- 5.5.5.1. Benzapyrene is not permitted in foodstuff raw material and foodstuffs designated as children's and dietary food.
- 5.5.6. Foodstuff raw material and foodstuffs are regulated for nitrogen-containing substances: histamine in the fish belonging to salmon and mackerel families (including tuna fish group); nitrates in fruit and vegetable produce; N-nitrozamines in fish, meat and their processed produce; the marked produce characterized by high frequency and level of N-nitrozamine content are fish and meat smoked items and beer molasses.
- 4.6. Hygienic standards in reference to radio-nuclide content are established to limit internal irradiation.
- 5.6.1.Radiation safety of foodstuffs is determined by its compliance with the permissible level of specific activity for radio-nuclides of tsesium-137 and strontsium-90.
- 5.6.2.Techniques for calculation and assessment of specific activity for tsesium-137 and strontsium-90 are listed in Attachment 3.
- 5.6.3. Radiation safety of the foodstuff produce contaminated with other radionuclides is determined by its compliance with regulations ' = 2.6.1.054-96

- "Standards of radiation safety (= C#-96)"
- 4.7. Foodstuff raw material and foodstuffs shall not contain pathogen microorganisms causing animal and human infectious diseases and parasite organisms.
- 4.7.1. After the veterinary-sanitary expert assessment conducted by the Federal veterinary service in accordance with the veterinary-sanitary rules currently in effect and accompanied by the mandatory documents issued by the bodies of the Gosvet-service, foodstuffs and foodstuff raw material of animal origin are subject to sanitary-hygienic expert assessment.
- 4.7.2. The veterinary-sanitary expert assessment in reference to the slaughtered produce to exclude the bacteria causing zoo-antroponosic diseases is regulated by the "Rules for slaughtered animals veterinary expert examination and for meat and meat produce veterinary-sanitary expert assessment" approved by the Ministry of Agriculture of the USSR of December 27, 1983 with Amendments of June 17, 1988.
- 4.7.3. Meat with no more than 3 4 finn per 40 sq cm detected as the result of examination shall be permitted for utilization as foodstuff raw material to produce minced meat sausage, canned meat and meat loaves after decontamination by one of the techniques regulated by the "Rules for slaughtered animals veterinary expert examination and for meat and meat produce veterinary-sanitary expert assessment".
- 4.7.4. Live larvae of helminthes listed in Attachment 4 are not permitted in fish, cancerous foodstuffs, mollusks, amphibia, reptiles and products processed from them. In case live larvae have been detected reference shall be made to SanPiN 3.2.569-96.
- 4.7.5. Eggs and larvae of helminthes as well as cysts of coli protozoa are not permitted in fresh and freshly frozen table greens, vegetables, fruit and berries.
- 4.7.6. Parasitologic research of sea food, fish and non-fish hunting produce as well as fresh and freshly frozen table greens, vegetables, fruit and berries is carried out in laboratories (centers) certified in accordance with the established procedure.
- 5.8 . Microbiological indices of hygienic standards include control over 4 groups of microorganisms:
 - sanitary-indicative ones that include the quantity of mesophyll aerobic and optional-anaerobic micro-organisms (QMA&OAMO) as well as Escherishia coli group bacteria (CGB) poly-forms;
 - conditionally pathogenic microorganisms that include E. coli, S. aureus, Proteus type bacteria and sulphitreducing clostridia;
 - pathogenic micro-organisms that include Salmonella;
 - micro-organisms inducing decay, basically those are yeast and molds.
- 4.7.1. Methodical documents to conduct microbiologic analyses for different groups of foodstuff raw material and foodstuffs are given in Attachment 5.
- 4.7.2. Foodstuff raw material and foodstuffs regulating according to the indices of microbiological quality and safety is carried out with respect to the majority of microorganic groups based on the alternative principle, i.e. the subject for regulating is the produce mass, E. coli group bacteria, the majority of conditionally pathogenic microorganisms as well as pathogenic micro-organisms (including Salmonella) are not permitted. In some other instances the standard reflects the quantity of colony-forming units in 1 gram (ml) of the product (QCFU/g, ml).
- 4.7.3. Mass consumption produce having no micro-biological standards in the Tables are not permitted to contain pathogenic micro-organisms, including Salmonella in 25 grams of

- the produce.
- In salads and raw vegetables mixtures that are ready for consumption Yersinia type bacteria are not permitted in 25 grams of the produce; control is carried out if the well-being condition is not complied with.
- 4.7.4. If the testing results prove to be unsatisfactory even in reference to at least one of the micro-biological indices the double sized sample is tested repeatedly with the sample being taken from the same batch. The results of the repeated analyses shall refer to the whole batch.
- 4.8. One of the principle criteria to assess the quality of the foodstuff raw material and the foodstuffs is the indices of the alimentary value including the main food components contained in the foodstuffs (proteins, fats, carbohydrates, vitamins, macro- and micro-elements) as well as energy value of the produce.
- 4.8.1. The foodstuff produce ability to satisfy the human individual's physiological needs is determined by its alimentary value.
- 4.8.2. The averaged indices of alimentary value 9the content of proteins, fats, carbohydrates) as well as the energy value of the foodstuff raw material and foodstuffs are given in section 7. In accordance with these recommendations specific values and alimentary value indices on different types of foodstuff produce are determined by the producer and included into the regulatory documentation.
- 4.8.3. The basic requirements with respect to the alimentary and energy values labeling are shown in Table 6.
- 4.9. Specialized produce for children's consumption are produce for the children aged 1 to 3, produce for the pre-school children and school children and produce for curative feeding for sick children of early ages.
- 5.10.1. Specialized produce for children's consumption should have high alimentary and biologic value, they should comply with the needs of the child's organism in alimentary substances and energy, they should be consistent with the functional state of children's digestive system and they should exclude potential hazards for their health.
 - The brief characteristic of the principle types of children's consumption produce is shown in Attachment 7.
- 5.10.2. With respect to quality and safety indices specialized children's produce shall comply with the hygienic standards shown in section 8.
- 5.10.3. Specialized products for children's consumption, for dietary feeding as well as their components shall comply with the requirements indicated in Attachment 8 in terms of their sanitary-microbiological quality indices.
- 5.11.To manufacture foodstuffs, food additives can be used permitted by the bodies of the Gossanepid-service of Russia in accordance with the list given in Attachment 9.
- 5.11.1.Being imported on the territory of the Russian Federation the foodstuffs containing food additives that are not listed in Attachment 9 shall be sold only if the permission has been granted to do so by the authorized organizations of Gossanepid-service of Russia.
- 5.11.2. Foodstuffs containing food additives that are prohibited for application in accordance with Attachment 10 are not eligible for production, import and sales on the territory of the Russian Federation.

- 5.1.3. The terms for the food additives application as well as their permissible levels in foodstuffs are regulated in the "Sanitary rules for food additives application" with Attachments.
- 4.10. Equipment, substances, materials and items manufactured from them coming into contact with foodstuffs that are not permitted for application for specific purposes by the organizations of the Gossanepid-service of Russia and lacking the Hygienic certificate on their compliance with the requirements of the Sanitary rules and regulations are not allowed to be used in the foodstuff raw material and foodstuffs production and sales.
- 4.11. Producers of the domestic foodstuff produce are recommended to pay great attention to the incoming raw material control when they control the foodstuffs safety indices if the production technology excludes accumulation and contamination by a particular contaminant (myco-toxines, pesticides, radio-nuclides and others).
- 5.13.1.Standard indices for the foodstuffs (sections 6 and 8) referring to this recommendation have the "raw material control" indication in the footnotes.

E">*A4*= 2.3.2.560-96 SanPiN 2.3.2.560-96

6.1.9.	Poultry, including	Toxic elements:		
	semi-finished			
	products, fresh,	Lead	0,5	
	chilled, frozen (all	Arsenic	0,1	
	kinds of wild birds	Cadmium	0,05	
	and industrially bred	Mercury	0,03	
	poultry)	Copper	5,0	
		Zinc	70,0	
		Antibiotics:		with the exception of wild birds
		Levomitsetyn	not permitted	< 0,01
		Tetracycline group	not permitted	< 0,01 units/g
		Grizyn	not	
			permitted	< 0,5 units/g
		Batsitratsyn	not permitted	< 0,02 units/g
		Nitrozamines: The total of NDMA and NDEA	0,002	
		Pesticides:		
		Hexachlorine-cyclohexan (" \$ (-isomers)	0,1	
		DDC and its metabolites	0,1	
		Radio-nuclides:		
		Cesium-137	180	Bk/kg
		Stronsium-90	80	Bk/kg
		Microbiological indica		

6.1.9.1.	Poultry carcasses			
	and meat: - chilled, frozen poultry (poultry	QMAAMO	1 A 10 ⁵	Not to exceed, CFU/g
	-boneless pieces of poultry meat; poultry meat in pieces and on bones including poultry quarters	Pathogens, including Salmonella QMAAO, Pathogens, including Salmonella	25 2Å 10 ⁵ 25	The mass (g) where the indicated amount is not permitted; if the analysis is positive 5by25 grams are taken as samples, the amount indicated is permitted in 1 sample, in this case the meat is subject to industrial reprocessing into canned food or sausage Not to exceed, CFU/g The mass (g) where the indicated amount is not permitted
6.1.9.2.	Poultry meat processed products, semi-finished products, chilled, frozen - pelmeni (dumplings) from meat	QMAAMO ECGB (coli-forms) pathogens including Salmonella	1Å 10 ⁶ 0,0001	Not to exceed, CFU/g The mass (g) where it is not permitted the same
	-chopped semi- finished products	QMAAMO pathogenic including Salmonella	1Å 10 ⁶ 25	Not to exceed, CFU/g The mass (g) where it is not permitted

6.1.10.	Poultry by-products, chilled, frozen	Toxic elements:		
		Lead Arsenic Cadmium Mercury	0,6 1,0 0,3 0,1	
		Nitroxamines, Antibiotics, Pesticides and Radio-nuclides:	according to p.6.1.9.	
		Microbiological indicators:		
6.1.10.1.	Poultry by-products, chilled, frozen (heads, necks and so on)	Pathogens including Salmonella	25	The mass (g) where it is not permitted
6.1.10.1.	Poultry viscera (liver, stomach muscles, heart)	QMAAMO Pathogens including Salmonella	1Å 10 ⁶ 25	Not to exceed, CFU/g, the mass (g) where it is not permitted
6.1.11.	Sausage products, smoked meat, culinary products from poultry meat	Toxic elements: Lead Arsenic	0,5 0,1	
		Cadmium Mercury Copper Zinc	0,05 0,03 5,0 70,0	
		Nitroxamines, The total of NDMA and NDEA	0,002 0,004	For smoked products
		Benzapyren	0,001	For smoked products
		Antibiotics, Pesticides and Radio-nuclides:	according to p. 6.1.9.	Raw material testing
		Microbiological indicators		

E">A4= 2.3.2.560-96 SanPiN 2.3.2.560-96

1	2	3		4			5
	l	Microbiolo	gical indi	cators:			-
Index	Product group	not to exceed QMAAMO, CFU/g,	Mass of t	he product (ir the following permitted		Pathogens, including Salmonella	Remarks
			ECGB(co li-forms)	Clostridine sulfite- reducing	S. Aureus		
6.1.11.1.	Cooked sausage products (sausage, meat loaves, sausages, thick sausages, thin egg sausage, egg boiled products in casing						
		1 A 10 ³	1,0	0,1	1,0	25	
6.1.11.2.	Cooked-smoked sausage and other products	1A1O ³	1,0	0,1	1,0	25	
6.1.11.3.	Poultry carcasses as well as baked and smoked-baked products packed or not packed	1 A 10 ³	1,0	0,1	1,0	25	
6.1.11.5.	Ready to eat fast frozen dishes from poultry meat (fried, boiled, from portion meat pieces)	1 A 10 ⁴	0,1	-	1,0	25	Enthero- coccus, not exceeding 1Å10 ³ CFU/g
6.1.11.6.	Ready to eat fast frozen dishes from chopped meat with sauces	1A1O ⁴ A	0,1	-	1,0	25	Enthero-coccus, not exceeding 2Å10³ CFU/g
Index	Product group	Indica	ators	Accepted levels (mg/kg), not to exceed		Remark	s

6.1.12.	pou	at produc ltry by-p ≦, live sau	roducts	s, (sso	Nitr Ben Anti Pest And	ozamin zapyrei ibiotics, icides, l	es and 1	According p. 6.1.10 According p. 6.1.4 According p. 6.1.9.	ng to	Raw mater	ial testing
						Mic	robio <mark>lo</mark>	gical indica	ators:			
Index	Index Product group			QMAAMO, grams) CFU/g, follow		he product (in a), where the ving is not rmitted Clostridine sulfite-reducing		Pathogens , including Salmonell a S. Aureus	Remarks			
6.1. Chic. 12.1 pâté	ken	2A10 ³	1,0	0,1	1 , 0	25						
6.1.12.2	6.1.12.2 Poultry liver pâté			5Å10 ³		1,0	0,1	1,0	25			
6.1.12.3.	6.1.12.3. Poultry meat liver sausage with plant/vegetable additives		5A	5Å10 ³		1,0	0,1	1,0	25			
Index	•				Pr	oduct	group		Indic	eators	Accepted le	vels (mg/kg) not to exceed Remarks

meat, canned poultry- vegetable/plant meat Lead 0,5 0,6 pâté-type			
poultry- Lead 0,5 vegetable/plant meat 0,6 pâté-type			
vegetable/plant meat 0,6 pâté-type			
including pâté-type 1,0 for canned products in assembled tin cans	n		
Arsenic 0,1			
1,0 pâté-type			
1,0 pute type			
Cadmium 0,05			
0,3 pâté-type			
0,1 for canned products in	n		
assembled tin cans			
Marayari 0.02 môté timo			
Mercury 0,03 pâté-type 0,1			
0,1			
Copper 5,0 meat and vegetable/pl	lant meat		
70,0 ones			
the same			
Zinc 70,0			
	for canned products in assembled tin cans		
Tin 200,0 assembled tin cans	assembled thi cans		
for canned products in	n		
Chromium 0,5 chromium plated tins			
material is subject to t			
Pesticides:			
Hexachlorine-cyclohexan (" \$ (-isomers)			
DDC and its metabolites 0,1			
Nitrates: $0,1$			
Meat/plant/vegetable	ones		
Antibiotics. 200 Raw material testing			
Antibiotics, 200 Raw material testing Nitrozamines and			
Radio-nuclides:			
according to			
p. 6.1.9.			
Microbiological indicators:	-		
	Remarks		
where the following is not permitted			
ECGBP Clostridine s. Pathoge (coli- Sulfite- aureus ns,			
forms) reducing includin			
g Salmone			
Ila			

6.1.13.1.		Poultry mea pasteurized food		2A10 ²		1,0	0,1	1,0	25	Bac. cereus in 1 g is not permitted
6.1.13.2.		Poultry mea sterilized ca food with a without plant/vegeta additives in pâté-type	anned nd able				Must comply with the requireme nts for industrial sterility for group "A" canned food		•	•
Index	Pro	oduct group	Indicator	S	Accepted levels exceed	(mg/kg	g), not to	Remarks		
6.1.14. Poultry meat processed by sublimation and freeze drying		Antibiotics, Nitrozamines, Pesticides and Radio-nuclides		According to p. 6.1.9. According to p. 6.1.9.		Recalculated for the source product taking into account the dry substance content in it as well as in the final product The same, Raw material testing				

E">A4= 2.3.2.560-96 SanPiN 2.3.2.560-96

1	2	3		4			5
		Microbiolo	gical indi	cators:			_
Index	Product group	not to exceed QMAAMO, CFU/g,	Mass of the product (in grams), where the following is not permitted			Pathogens, including Salmonella	Remarks
			ECGB (coli- forms)	Clostridine sulfite- reducing	S. Aureus		
6.1.14.1.	Chicken minced meat processed by sublimation drying	1 A 10 ⁴	0,01	0,1	25	25	Proteus is not permitted in 0,1 g

6.1.4.2.	Chicken minced meat	5Å10 ³	0,1	0,1	1,0	25	The same		
Index	Product group	Indicators		Accepted levels (mg/kg), not to exceed		Remarks			
6.1.15.	Eggs and processed products from them (egg, melange)	Toxic ele Lead Arsenic Cadmium Mercury Copper Zinc Antibioti Levomits Tetracycl Streptomi Batsitrats Pesticide Hexachlo cyclohexa isomers) DDC and metabolit	cs: etyn ine group cyn yn s: rine- un (" \$ (- its	0,3 0,1 0,01 0,02 3,0 50,0 not permitted no	<0,5ui	units/gram nits/gram units/gram			
		Radio-nu Cesium-1 Stroncium	37		Bk/kg				
					Bk/kg	;			

Index	Product group			where	the	Pathogens , including Salmonell a	Remarks
			ECGB (coli- forms)	Clost ridin e sulfit e-reduc ing	S. Aure us		
6.1.15.1.	Chicken, Quail dietary egg	5 A 10 ³	0,1	-	-	5 by 25	Testing is conducted on yokes
6.1.15.2	Table chicken egg	5 A 10 ⁵	0,01	-	-	25	The same
6.1.15.3.	Frozen egg melange, frozen egg whites and yokes	5 A 10 ⁵	0,1	1,0	1,0	25	
6.1.15.4.	Frozen egg melange with salt and sugar	5 A 10 ⁵	0,1	1,0	1,0	25	
Index	Product group	Indicate		Accepte levels (not to e	mg/kg)		Remarks
6.1.16.	Egg powder	Toxic elements	:				
		Lead	3,0				
		Arsenic	0,6				
		Cadmium	0,1				
		Mercury		0,1			

6.3. Fish, other river/sea products and products made from them. SanPiN 2.3.2.560-96

6.3. Fi	sh, other rive	r/sea products and	products mad	de from them. SanPiN 2.3.2.560-96
Index	Group of products	Indicators	Permissible levels not more than mg/kg	Comments
6.3.1.	Live fish, raw- fish, cooled, frozen, minced fish, fillet	Toxic elements:		
		lead	1.0	
		arsenic	2.0 1.0 5.0	tuna, sword-fish, white-sturgeon (beluga) river (fresh-water) sea (sea-water)
		cadmium	0.2	
		mercury	0.3 0.6 0.5 0.1	fresh-water, non-predator fresh-water, predator sea-water tuna, sword-fish, white-sturgeon (beluga)
		copper	10.0	
		zinc	40.0	
		histamine	100.0	tuna, mackerel, salmon, herring
		nitrosoamines: the product of NDMA and NDEA	0.003	
		pesticides		contents of pesticides for minced fish and fillet are controlled at source
		hexachloro- cyclohexane	0.2	sea-water, meat of sea mammals
		(a,b,g-isomers)	0.03	fresh-water
		DDT (dichlorodiphenyl- dichloroethane) and its metabolites	0.2 0.3 2.0 0.2	sea-water fresh-water salmon, sturgeon, fat herring meat of sea mammals
		2,4-D acid, its salts and ethers	not allowed	fresh-water
		polychlorinated biphenyls	2.0	
		radionuclides:		
		cesium-137	130	Bk/kg
		strontium-90	100	same

Index	Group of products	KMAFAiM not more than KOE/g	Mass of produ	ct (g) which mu	ıst contain:	
			BGKP (coli)	S. aureus	Pathogenic, including Salmonella	Com- ments
6.3.1.1.	Fresh fish	5x10 ⁶	0.01	0.01	25	
6.3.1.2.	cooled, frozen fish	$1x10^{5}$	0.001	0.01	25	
6.3.1.3.	Fish fillet and minced fish	$5x10^4$	0.001	0.01	25	
6.3.1.4.	unprocessed frozen semi-finished products	$5x10^4$	0.01	-	15	
6.3.2.1	canned foods of spicy and special pickling from cut and uncut fish	1x10 ⁵	0.01	-	25	no mold or yeast in 0.1 gram
6.3.2.2	canned foods of fresh spicy pickling and special pickling from: - uncut fish - cut fish	1x10 ⁵ 5x10 ⁴	0.1 0.1	0.01 0.01	25 25	same same
6.3.2.3	canned cut fish with addition of vegetable oils, sauses, gravy, with or without garnish (including salmon fish in oil and with preserving agents)					
		$2x10^{5}$	0.01	0.01	25	same
6.3.2.4.	canned foods of fresh pickling from cut fish in gravy	$5x10^4$	0.01	0.1	25	same
6.3.2.5	canned "Paste" - fish pastes - albumin paste "Ocean"	5x10 ⁵	0.01	0.01	25	same
6.3.2.6.	Preserved fish in glass, aluminium and tin tare				-	-
		$1x10^{5}$	0.1	0.1	25	same

Index	Group of products	Indicators	Permissible levels, not more than mg/kg	Comments
1	2	3	4	5
6.3.2.	(tinned) canned foods	Toxic elements; lead, arsenic, cadmium, mercury, copper and zinc tin	same as 6.3.1 200	for foods in combined tin tare
		chromium	0.5	for foods in chrome-plated tare
		hystomine, nitroamines, pesticides,		
		polychlorinated biphenyls and radionuclides		contacts as:
		radionucides	same as 6.3.1	contents are controlled at source
6.3.3	Dried, dry-cured, smoked, salted, pickled fish and other ready-to-eat fish products	Toxic elements, hystomines and polychlorinated biphenyls	same as 6.3.1	calculated at source taking into account the content of dry substances in the source material and in the final product; controlled at source
		Nitrosoamines: product of NDMA and NDEA Radionuclides:	0.003	
	- smoked, salted, pickled fish and other fish products			
	- dried, dry-cured fish	cesium-137 strontium-90 Pesticides:	260 200	Bk/kg same controlled at source
		hexachlorocyclohexane		
		(a,b,g-isomers)	0.2	
				cured fillet, fat herring
		benzapyren	0.001	smoked fish

Index	Group of products	KMAFAiM not more than KOE/g	contain:				
		_	BGKP (coli)	S. aureus	Sulfate reducing clostridia	Pathogeni c, including Salmonell a	Com- ments
1	2	3	4	5	6	7	8
6.3.3.1	Fish products, hot and cold smoking:						
	- hot smoked foods	1×10^3	1.0	1.0	-	25	
	- hot smoked foods,	1 104	1.0	1.0		25	
	frozen	1×10^4 1×10^4	1.0 1.0	1.0 1.0	-	25 25	
	 cold smoked fish assorted fish, ham, products with the addition of spices, minced cured fillet, sliced cured fillet 	1x10 ⁵	0.01	0.1	0.1	25 25	
6.3.3.2	Slightly salted fillet, slightly smoked, frozen and vacuum packed	$1x10^{4}$	1.0	1.0	0.1	25	
6.3.3.3.	Salted, spiced, pickled fish	1x10 ⁵	1.0		1.0	25	
6.3.3.4	dry-cured fish	1X10	1.0	-	1.0	23	mould and
0.5.5.4	products - dry-cured fish	$1x10^{4}$	1.0	-	1.0	25	yeast not more than 100
	- slightly dry-cured fish	5x10 ⁴	1.0	-	0.1	25	KOE/g
6.3.3.5	Dried fish products: - dried fish - dry fish soups	1x10 ⁴ 5x10 ⁵	1.0 0.001	- -	0.01	25 25	
6.3.3.6	Thermally treated culinary products: - fried fish, baked, minced fish products (fish-balls, fish-sausages), fish rolls, pelmeni (boiled dough with fish						
	filling), fish in various gravy, etc.	$1x10^{4}$	1.0	1.0	-	25	
	-fish in aspic and other jelly products;	5x10 ⁴	0.1	1.0	-	25	
	paste-like fish products (pate)multi-component products (solyanka (a sharp tasting thick	1x10 ⁵	0.01	0.1	-	25	

	soup of vegetables and meat or fish), plov (rice with minced meat or fish), hors d'oeuvre, stewed sea products with vegetables)	5x10 ⁴	0.01	1.0	-	25	
6.3.3.7.	Culinary products and multi-component dishes cooked without thermal treatment by means of mixing various						
	components:	$1x10^{5}$	0.01	0.1	-	25	
	- salads (fish salads) - cut herring - cut fish, slightly salted, including salmon without preserving additives with vegetable oil and gravy, with garnish, cut, without	2x10 ⁵	0.001	0.1	-	25 25	
	gravy, without garnish, cut, spiced	1X10	0.01	1.0	-	23	
6.3.3.8	Culinary products, boiled and frozen products, fast frozen	_					
	fish snacks	$2x10^5$	0.1	0.1	-	25	
6.3.3.9.	Fish products, vacuum packed after	~			4.0		
	thermal treatment	$5x10^{3}$	1.0	1.0	1.0	25	
6.3.3.10	mayonnaise on the basis of fish broth	-	0.01	-		-	mould KOE/g yeast not more than 100 KOE/g

Index	Group of products	Indicators	Permissible levels, not more than mg/kg	Comments
1	2	3	4	5
6.3.4.	Caviar and milt of fish and products made of caviar and milt	Toxic elements; lead, arsenic, cadmium, mercury, pesticides hexachlorocyclohexane (a,b,g-isomers) DDT (dichlorodiphenyldichloroethane) and its metabolites	1.0 1.0 1.0 0.2	for caviar and milt products contents are controlled at source

polychlorinated biphenyls radionuclides:

same as 6.3.1

Index	Group of products	KMAFAiM not more than KOE/g	Mass of product (g) which must contain:				
		0	BGKP (coli)	S. aureus	Sulfate reducing clostridia	Pathogeni c, including Salmonell a	Com- ments
1	2	3	4	5	6	7	8
6.3.4.1	Roe milt and caviar, frozen	$5x10^4$	0.001	0.01	-	25	
6.3.4.2.	Culinary products, caviar products: - thermally treated - multicomponent	$1x10^{4}$	1.0	1.0	-	25	mould -
	dishes without thermal treatment prepared by means of mixing	2x10 ⁵	0.1	0.1	0.1	25	not more than 50 KOE/g yeast - not more than 30 KOE/g
6.3.4.3	Sturgeon caviar: granular, pressed, canned (in jars)	$1x10^{4}$	1.0	1.0	1.0	25	same
	- granular, pasteurized	$1x10^{3}$	1.0	1.0	1.0	25	same
	- roe, slightly salted, salted	$5x10^4$	1.0	1.0	1.0	25	same
6.3.4.4	Salmon fish caviar, granular (in cans, jars, barrels), including from frozen roe	$1x10^{4}$	1.0	1.0	1.0	25	same
6.3.4.5.	Caviar of other fish species: - punched, salted	$1x10^{4}$	1.0	1.0	1.0	25	mould - not more than 50 KOE/g; yeast - not more than 50 KOE/g
	- punched, delicacy	$1x10^{4}$	1.0	1.0	1.0	25	same
	- capelin caviar	$5x10^4$	1.0	1.0	1.0	25	same
	- pasteurized, pressed	$5x10^{3}$	1.0	1.0	1.0	25	same
	- slightly salted, salted	5x10 ⁴	1.0	1.0	1.0	25	same
	- smoked	$5x10^{3}$	1.0	1.0	-	25	same
		$5x10^{3}$					

6.3.4.6 Albumin caviar

(black, red)

 $1x10^{4}$

1.0

1.0

1.0

25

same

Index	Group of products	Indicators	Permissible levels not more than mg/kg	Comments
1	2	3	4	5
6.3.5.	Fish liver and products made from fish liver	Toxic elements:		
		lead	1.0	
		cadmium	0.7	
		mercury	0.5	
		tin	200	for canned foods in combined tin tare
		chrome	0.5	for canned foods in chrome-plated tare
		Pesticides:		for liver products contents are controlled at source
		hexachloro- cyclohexane		
		(a,b,g-isomers)	1.0	
		DDT (dichlorodiphenyldi chloroethane) and		
		its metabolites	3.0	
		polychlorinated		
		biphenyls	5.0	
		radionuclides:	same as 6.3.1	for liver products contents are controlled at source

MICROE	BIOLOGICAL INDI	CATORS						
6.3.5.1	canned fish liver	Must meet the requ	Must meet the requirement of industrial sterility for group "A" canned foods					
6.3.6	fish fat	See section "Oil ray	w materials and	fat products", 6.7.7				
	non-fish river/sea products (mollusks, crustaceans, sea algae) and products made from them, amphibians, reptiles	Toxic elements:						
	- mollusks,	lead	10.0					
	crustaceans	arsenic	5.0					
		cadmium	2.0					
		mercury	0.2					
		copper zinc	30.0					
			200.0					
	- sea algae	lead	0.5	for products made from mollusks,				
		mercury Radionuclides:	0.1	crustaceans, and algae - control at source				
		cesium-137	200	Bk/kg				
		strontium-90	100	same				

Index	Group of products	KMAFAiM not more than KOE/g	Mass of producontain:				
			BGKP (coli)	S. aureus	Sulfate reducing clostridia	Pathogeni c, including Salmonell a	Com- ments
1	2	3	4	5	6	7	8
5.3.7.1	sea invertebrates - crabs, krills, etc.: - fresh - cooled, frozen	5x10 ⁴ 1x10 ⁵	0.01 0.001	0.01 0.01	-	25 25	
6.3.7.2	- mussels: - for culinary production; - for canning	5x10 ⁴ 1x10 ⁵	0.1 0.1	0.1 0.1	- 0.1	25 25 25	
6.3.7.3	- live mussels, oysters,	5x10 ³	1.0	0.1	-	25	no entero- cocci in 0.1 g
6.3.7.4	- sea algae (fresh)	$5x10^{4}$	0.1	_	-	25	
6.3.7.5	laminaria (fresh)	$1x10^{4}$	0.1	_	0.01	25	
6.3.7.6	Canned foods from non-fish sea products with addition of vegetable oils, gravy, sauses with and without garnish	2x10 ⁵	0.01	1.0		25	no mould or yeast in 0.1g
6.3.7.7	canned mussels	$5x10^{4}$	0.1	0.1	-	25	same
6.3.7.8	canned non-fish sea products		must satisfy the "A" canned for		for industria	al sterility fo	
6.3.7.9	Sea invertebrates (cured products)	2x10 ⁴	1.0	-		25	mould, yeast - not more than 100 KOE/g
6.3.7.10	Boiled and frozen foods: - main course from						
	mussel meat; - crab/krill meat,	$2x10^{4}$	0.1	-		25	
	paste "Ocean" - minced products	$5x10^4$	1.0	-		25	
	(crab sticks, etc.)	1×10^3	1.0	-		25	
60511	- mussel meat	$5x10^4$	0.1	-		25	
6.3.7.11 6.3.7.12	Jams from laminaria Dried and albumin non-fish sea products: dry mussel broth, broth cubes and	5x10 ³	1.0	0.01	-	25	
	pastes, albumin isolated	5x10 ⁴	0.1	0.01		25	

	- hydrolyzate from mussels (MIGI-K)	$5x10^{3}$	1.0	-	25
	- albumin- hydrocarbon concentrate from mussels	-	1.0	1.0	25
6.3.7.13	sea algae products: - laminaria, dried, frozen	5x10 ⁴	1.0	-	- 25
	 food agar, agaroid, nitrofurazone and food sodium alginate 	see Section "Other	products" 6.9.6.2		

^{*} Microbiologic indicators for canned foods are determined in accordance with the "Instruction for the sanitary and technical control of canned foods at whole-sale bases, production enterprises, and retail-sales network, and at public canteens and restaurants" (GK SEN RF No. 01-19/9-11 dated 21.07.92, M1993).